

## **Operator Training Program**



Process Control and Laboratory
Workshop Schedule
Winter - Spring 2008

# **Department of Environmental Quality Operator Training Program Schedule**

Course #	Title	Location	Dates	Times	Maximum Enrollment	Fee
DEQ 19	Basic Lab Skills for Wastewater Operators	DEQ, Piedmont Regional Office Glen Allen	January 29 – 30, 2008	8:30 AM – 4:30 PM	16	\$100
DEQ 19	Basic Lab Skills for Wastewater Operators	DEQ, West Central Regional Office, Roanoke	February 5 – 6, 2008	8:30 AM – 4:30 PM	16	\$100
DEQ 18	Introduction to BNR (Biological Nutrient Removal)	Henrico County WRF Varina	February 12 – 13, 2008	8:30 AM – 4:30 PM	16	\$100
DEQ 3	Dissolved Oxygen & BOD Testing Workshop	DEQ, Piedmont Regional Office Glenn Allen	February 20 – 21, 2008	8:30 AM – 4:30 PM	16	\$100
DEQ 13	Activated Sludge Process Control Part I	Massaponnax WWTP Spotsylvania County	February 26 – 28, 2008	8:30 AM – 4:30 PM	16	\$150
DEQ 18	Introduction to BNR (Biological Nutrient Removal)	Opequon WRF Winchester	March 11 – 12, 2008	8:30 AM – 4:30 PM	16	\$100
DEQ 19	Basic Lab Skills for Wastewater Operators	DEQ, Southwest Regional Office, Abingdon	April 1 - 2, 2008	8:30 AM – 4:30 PM	16	\$100
DEQ 14	Activated Sludge Process Control Part II	Massaponnax WWTP Spotsylvania County	April 22 – 24, 2008	8:30 AM – 4:30 PM	16	\$150

Course descriptions are provided on the back of the page.

#### **Course Descriptions**

#### DEQ – 19 Basic Lab Skills for Wastewater Operators

Training Credits: 1.0 Reg

Registration Fee: \$100

This two day workshop provides hands on instruction in the basic skills required to accurately perform wastewater related sampling and testing. If you are responsible for conducting your facility's sampling and testing, this program will be extremely beneficial. The program covers lab water sources, equipment selection, equipment and glassware cleaning and storage, and the collection and preservation of representative samples. The program also includes hands on experience in using glassware and lab instruments to dilute samples and chemicals and to prepare standards. It will also present the basic quality assurance considerations required at any facility performing permit related testing. The QA discussion will include the use of blanks, replicates, split samples and performance standards, procedures for the systematic verification of instrument accuracy, initial demonstration of competency (IDC) requirements and other quality assurance related topics. The program will include lectures, demonstrations and hands on laboratory activities. The program is recognized by the State Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals.

#### DEQ - 18 Introduction to BNR (Biological Nutrient Removal) Training Credits: 1.2 Registration Fee: \$100

This two day workshop provides an introduction to the principles involved in biological nutrient removal. The focus of the program will be the suspended growth (activated sludge) BNR processes. If you operate or manage a treatment system which includes biological nutrient removal or will be required to implement biological nutrient removal, this program will be helpful. The program will discuss the basic concepts associated with biological nutrient removal (nitrification, denitrification and biological phosphorus removal). It will identify performance factors, provide typical operating ranges for many of these factors and review various design and operational configurations currently being used for BNR. Based on availability, the program will include one or more site visits to facilities currently achieving full or partial BNR. The program is recognized by the State Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals.

#### DEQ - 3 Dissolved Oxygen & BOD Sampling & Testing Training Credits: 1.0 Registration Fee: \$100

This two day workshop provides the knowledge and skills required to perform dissolved oxygen and five day biochemical oxygen demand sampling and testing. The program includes hands on training in performing the subject analyses as well as sampling considerations, sample preservation, sample pretreatment and seeding, required calculations, recordkeeping and required quality assurance considerations. If you perform or supervise the performance of dissolved oxygen and biochemical oxygen demand testing you will find this program beneficial. The program is recognized by the State Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals.

#### DEQ - 13 Activated Sludge Process Control, Part I Training Credits: 2.0 Registration Fee: \$150

This three day workshop provides the knowledge and skills required to monitor and adjust the operation of an activated sludge treatment plant. The program will focus on the basic concepts, process observations, basic process control testing, including settled sludge volume (settleability) testing, microscopic examination, dissolved oxygen and alkalinity, recordkeeping and data interpertation. The program's hands on activities will include observation of an activated sludge system, collection and analysis of process control samples, and data analysis. Managers, operators and operator trainees of activated sludge treatment systems will find this program very helpful. The program is recognized by the State Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals.

#### DEQ - 14 Activated Sludge Process Control, Part II Training Credits: 2.0 Registration Fee: \$150

This three day workshop provides knowledge and skills required to evaluate and control the operation of an activated sludge treatment plant. The program will focus on the basic and advanced process control strategies, process control calculations, data interpertation and process troubleshooting. The program's hands on activities will include analysis of operational data, performing process control calculations; using calculated data to adjust operating levels and troubleshooting activated sludge treatment process performance problems. Managers, operators and operator trainees of activated sludge treatment systems will find this program very helpful. The program is recognized by the State Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals.

### Process Control and Sampling & Testing Workshops General Information

#### **Course Locations:**

#### **DEQ - Piedmont Regional Office (PRO)**

The Piedmont Regional Office of the Department of Environmental Quality is located at 4949A Cox Road, Glen Allen, Virginia. Persons registering for the workshops will receive directions and other pertinent information (i.e. nearby lodging and restaurants).

#### **DEQ - West Central Regional Office (WCRO)**

The West Central Regional Office of the Department of Environmental Quality is located at 3019 Peters Creek Rd in Roanoke, Virginia. Persons registering for the workshops at this location will receive directions and other pertinent information (i.e. nearby lodging and restaurants).

#### **Henrico County Water Reclamation Facility**

The Henrico County Water Reclamation Facility is located in Varina, Virginia. Persons registering for the workshops at this location will receive directions and other pertinent information (i.e. nearby lodging and restaurants).

#### Spotsylvania County, Massaponax Wastewater Treatment Plant

The Spotsylvania County Massaponax Wastewater Treatment Plant is located in Fredericksburg, Virginia. Persons registering for the program will receive directions and other pertinent information (i.e. nearby lodging and restaurants).

#### **Opequon Water Reclamation Facility**

The Opequon Water Reclamation Facility is located in Winchester, Virginia. Persons registering for the workshops at this location will receive directions and other pertinent information (i.e. nearby lodging and restaurants).

#### **DEQ - Southwest Regional Office (SWRO)**

The South West Regional Office of the Department of Environmental Quality is located at 355 Deadmore Street in Abingdon, Virginia. Persons registering for the workshops at this location will receive directions and other pertinent information (i.e. nearby lodging and restaurants).

#### Registration:

Only complete applications (registration form & payment) submitted to the Department's Office of Finance at the address shown on the form will be considered. Applicants are accepted on a "first comefirst served" basis. Due to popularity of the programs no "walk-in" registrations can be accepted. To register for these programs complete the registration form on the back, attach the appropriate payment and send to the address shown on the form. You will receive notification of your acceptance and an information package containing directions and other pertinent information.

#### Fees:

Fees are based on the length of the program and the complexity of the topic area covered. Fees for each program are listed on the schedule. Fees must be submitted in the form of check or money order made payable to the Department of Environmental Quality prior to the start of the program. No purchase orders or credit cards can be accepted. State Agencies should contact the Department's Finance Office (804 698-4162) for IAT procedures.

#### **Course Approval:**

These courses are approved or have been submitted for approval by the Virginia Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals . Approved programs can, when applicable, be used as substitution for required operational experience.

#### Withdrawal, Substitution & Refund Policy:

Registrants who must withdraw should notify the Department as soon as possible. Substitutions are permitted anytime **prior to the start of class**. Registrants who withdraw form the program at least 5 business days prior to the start of the program will receive a full refund. Withdrawals made after this time will not be eligible for a refund.

#### Cancellation:

The Department reserves the right to cancel any program when there are insufficient registrations. People who register will be notified of the cancellation and will receive a refund.

#### **Breaks and Lunches:**

The registration fee does not include break refreshments or lunch.

#### **Additional Information:**

Contact the Operator Training Program Phone: 804 698-4106/804 698-4143 email: wwoperator@deq.virginia.gov

## Workshop Registration Form

(If more than one person from your facility is planning to attend, please use a separate form for each person registering)

Please	check the workshop(s) you are re	gistering for:		
	<b>DEQ 19 Basic Lab Skills for Was</b> DEQ Piedmont Regional Office, Gle		January 29 - 30, 2008	\$100
	<b>DEQ 19 Basic Lab Skills for Was</b> DEQ West Central Regional Office,		February 5 - 6, 2008	\$100
	<b>DEQ 18 Introduction to BNR</b> Henrico County WRF, Varina, VA		February 12 - 13, 2008	\$100
	<b>DEQ 3 D.O. &amp; BOD Sampling &amp; T</b> DEQ Piedmont Regional Office, Gle	_	February 20 - 21, 2008	\$100
	<b>DEQ 13 Activated Sludge Proces</b> Massaponnax WWTP, Fredericksbu	February 26 - 28, 2008	\$150	
	<b>DEQ 18 Introduction to BNR</b> Opequon WRF, Winchester, VA	March 11 - 12, 2008	\$100	
	<b>DEQ 19 Basic Lab Skills for Was</b> DEQ Southwest Regional Office, Ab		April 1 - 2, 2008	\$100
DEQ 14 Activated Sludge Process Control Part II Massaponnax WWTP, Fredericksburg, VA			April 22 – 24, 2008	\$150
	Regis	tration Informati	<u>on</u>	
Name:			<del></del>	
Mailing	Address:			
Str	eet/PO Box:			
City	y:	State: Zip	:	
Daytime	e Phone: ()	Daytime Fax: ()	·	
Email A	Address:		_	
Employ	er Information:			
	er:			
Supervi	isor:			
Telepho	one:FAX:			
Email:			<del></del>	
Mail re	egistration form & payment to:	Office of Finance Department of Envi PO Box 1104 Richmond, VA 232	·	
Total pa	ayment enclosed \$	110	· <del>-</del>	